

***NATIONAL WEATHER SERVICE INSTRUCTION 10-511
NOVEMBER 3, 2004***

***Operations and Services
Public Weather Services, NWSPD 10-5***

WFO SEVERE WEATHER PRODUCTS SPECIFICATION

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SUMMARY OF REVISIONS: This directive supersedes NWSI 10-511, dated April 4, 2003. This directive revises the Valid Time Event Code for the Severe Thunderstorm Warning, Tornado Warning, Severe Weather Statement and Watch County Notification Message product specification (Sections 2, 3, 4 and 5). The directive also adds marine zones to the Watch By County Notification Message product specification (Section 5) and changes the format of the Severe Weather Statement from non-segmented to segmented (Section 4).

<u>Signed</u>	<u>08/03/04</u>
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Director, Office of Climate, Water, and Weather Services	

WFO Severe Weather Products Specification

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1. Introduction. This procedural instruction describes the severe weather products issued by Weather Forecast Offices (WFO), guidelines associated with these products, detailed content as needed, and a generic format for each product type.

2. **Severe Thunderstorm Warning (product category SVR).**

2.1 Mission Connection. Severe Thunderstorm Warnings are issued to protect lives and property. WFO forecasters issue Severe Thunderstorm Warnings to provide the public and emergency managers with advance notice of damaging wind gusts and large hail.

2.2 Issuance Guidelines.

2.2.1 Creation Software. WFOs will use WarnGen to issue Severe Thunderstorm Warnings.

2.2.2 Issuance Criteria. WFOs should issue Severe Thunderstorm Warnings when there is radar or satellite indication and/or reliable spotter reports of wind gusts equal to or in excess of 50 knots (58 mph) and/or hail size of 3/4 inch (penny) diameter or larger.

2.2.3 Issuance Time. Severe Thunderstorm Warnings are non-scheduled, event driven products.

2.2.4 Valid Time. Valid times should be 30 to 60 minutes. After 60 minutes, WFOs should issue a new warning to extend the valid time.

2.2.5 Product Expiration Time. The product expiration time is the end of warning valid time.

2.3 Technical Description. Severe Thunderstorm Warnings will follow the format and content described in this section.

2.3.1 UGC Type. County (Zone for Alaska and parts of Pacific Region)

2.3.2 Mass News Disseminator Broadcast Line. SVRs should include the broadcast line "BULLETIN - EAS ACTIVATION REQUESTED." If a state does not require EAS activation for SVRs, the broadcast line will read "BULLETIN - IMMEDIATE BROADCAST REQUESTED." The term "BULLETIN" is used when information is sufficiently urgent to warrant breaking into a normal broadcast.

2.3.3 Mass News Disseminator Header. The SVR Mass News Disseminator (MND) header is "SEVERE THUNDERSTORM WARNING."

2.3.4 Content. WFOs should not combine Severe Thunderstorm and Flash Flood Warnings. Severe Thunderstorm Warnings will include the possibility of tornadoes if a Tornado Watch is in effect. If a severe thunderstorm moves over coastal waters, a Special Marine Warning will be issued (see NWSI 10-313 for details on Special Marine Warnings). Severe Thunderstorm

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Warnings will follow a standard bullet style format. WFOs should keep bullets brief. WFOs should include call to action statements. The WFO Shift Leader on duty may discontinue call to action statements in warnings during widespread severe weather outbreaks. Locations should be larger towns and other familiar landmarks. WFOs may reinforce the warning with recent history to support their reasoning. Names of states and counties (or parts of counties) should be spelled out. WFOs should use the nine part divisions (i.e., northeast, east central, etc.) to identify portions of states or counties under warnings. WFOs may use mileage markers as reference points in rural areas when a storm is occurring or forecast to move over a major highway.

The Severe Thunderstorm Warning format will contain this information in the following order:

- a. Type of warning; and warning location(s);
- b. Valid time;
- c. Time, basis for warning; forecast impacts (range of hail sizes and wind gusts);
- d. Indicate which locations are to be impacted during the warning, using the nationally approved pathcast and non-pathcast formats (see Section 3.3.5);
- e. A BRIEF concluding paragraph with additional information, and call-to-action should be included; and
- f. The latitude and longitude pairs outlining the 'area of greatest impact' polygon drawn in WarnGen will be included after the fourth bullet and call to action. Forecasters should draw the polygon to be a subset of the warned county(ies) and show the area where severe weather is most likely (i.e., unless severe weather is expected to cover the entire county, do not mirror the warned county outline).

2.3.5 Format.

WUaa5i cccc ddhhmm
SVRccc
STC001-002-ddhhmm-
/k.aaa.cccc.pp.s.####.yymmddThhnnZ_B-yymmddThhnnZ_E/

BULLETIN - EAS ACTIVATION (or IMMEDIATE BROADCAST) REQUESTED
SEVERE THUNDERSTORM WARNING (...CORRECTED as required)
NATIONAL WEATHER SERVICE CITY STATE
time am/pm time_zone day mon dd yyyy

THE NATIONAL WEATHER SERVICE IN CITY
HAS ISSUED A

* SEVERE THUNDERSTORM WARNING FOR...
COUNTY ONE IN SECTION STATE (List warned counties)
COUNTY TWO IN SECTION STATE (# Counties will match # counties in UGC Line)

* UNTIL hhmm am/pm time_zone (Expiration time of warning)

* AT hhmm am/pm time_zone... (Warning basis statement)
(List impacts, including range of hail sizes and wind gusts)

* THE SEVERE THUNDERSTORM WILL BE NEAR... (Pathcast Version)
LOCATION #1 AROUND hhmm am/pm time_zone...
LOCATION #2 AROUND hhmm am/pm time_zone...

OR

LOCATIONS IMPACTED INCLUDE... (No Pathcast Version)
LOCATION #1...
LOCATION #2...

(Impact Locations are mandatory, either pathcast or no pathcast version listed above)

CALL TO ACTION

LAT...LON (Mandatory list of latitude/longitude points outlining the forecaster-drawn area of greatest impact)

\$\$
FORECASTER NAME/NUMBER (OPTIONAL)

Figure 1. Severe Thunderstorm Warning Format

2.4 Updates, Amendments and Corrections. Updates and amendments are not applicable. WFOs will reissue Severe Thunderstorm Warnings for significant grammatical errors, format or dissemination code errors, or for counties either omitted or erroneously added to a warning. Corrected warnings will have the same time in the Mass News Dissemination Header and the same Event Tracking Number in the Valid Time Event Code line as the original warning. WFOs should issue Severe Weather Statements to inform customers of erroneous counties removed from original warnings (either in the FIPS/Zone UGC code or in the body of the warning).

3. **Tornado Warning (product category TOR).**

3.1 **Mission Connection.** Tornado warnings are issued to protect lives and property. WFO forecasters issue Tornado Warnings to provide the public and emergency managers with advance notice of tornadoes.

3.2 **Issuance Guidelines.**

3.2.1 **Creation Software.** WFOs will use WarnGen to issue Tornado Warnings.

3.2.2 **Issuance Criteria.** WFOs should issue Tornado Warnings when there is radar or satellite indication and/or reliable spotter reports of a tornado.

3.2.3 **Issuance Time.** Tornado Warnings are non-scheduled, event driven products.

3.2.4 **Valid Time.** Valid times should be 15 to 45 minutes. After 45 minutes, WFOs should issue a new warning to extend the valid time.

3.2.5 **Product Expiration Time.** The product expiration time is the end of warning valid time.

3.3 **Technical Description.** Tornado Warnings will follow the format and content described in this section.

3.3.1 **UGC Type.** County (Zone for Alaska Region and parts of Pacific Region).

3.3.2 **Mass News Disseminator Broadcast Line.** TORs will include the broadcast line “BULLETIN - EAS ACTIVATION REQUESTED.” The term “BULLETIN” is used when information is sufficiently urgent to warrant breaking into a normal broadcast.

3.3.3 **Mass News Disseminator Header.** The TOR MND header is “TORNADO WARNING.”

3.3.4 **Content.** If a tornado moves over coastal waters, a Special Marine Warning will be issued (see NWSI 10-313 for details on Special Marine Warnings). Tornado Warnings will follow a standard bullet style format. WFOs should keep bullets brief. WFOs should include a call to action statement. The WFO Shift Leader on duty may discontinue call to action statements in warnings during widespread tornadic outbreaks. Locations should be larger towns and other familiar landmarks. WFOs may reinforce the warning with recent history to support their reasoning. Names of states and counties (or parts of counties) should be spelled out. WFOs should use the nine part divisions (i.e., northeast, east central, etc.) to identify portions of states or counties under warnings. WFOs may use mileage markers as reference points in rural areas when a storm is occurring or forecast to move over a major highway.

The Tornado Warning format will contain this information in the following order:

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- a. Type of warning; warning location(s);
- b. Valid time;
- c. Time, basis for warning; forecast impacts;
- d. Indicate which locations are to be impacted during the warning, using the nationally approved pathcast and non-pathcast formats (see Section 4.3.5);
- e. A BRIEF concluding paragraph with additional information, and call-to-action should be included; and
- f. The latitude and longitude pairs outlining the “area of greatest impact” polygon drawn in WarnGen will be included after the fourth bullet and call to action. Forecasters should draw the polygon to be a subset of the warned county(ies) and show the area where severe weather is most likely to occur (i.e., unless severe weather is expected to cover the entire county, do not mirror the warned county outline).

3.3.5 Format.

WFaa5i cccc ddhhmm
 TORccc
 STC001-002-ddhhmm-
 /k.aaa.cccc.pp.s.####.yymmddThhnnZ_B-yymmddThhnnZ_E/

BULLETIN - EAS ACTIVATION REQUESTED
 TORNADO WARNING
 NATIONAL WEATHER SERVICE CITY STATE
 time am/pm time_zone day mon dd yyyy

THE NATIONAL WEATHER SERVICE IN CITY
 HAS ISSUED A

* TORNADO WARNING FOR...
 COUNTY ONE IN SECTION STATE (List warned counties)
 COUNTY TWO IN SECTION STATE (# Counties will match # counties in UGC Line)

* UNTIL hhmm am/pm time_zone (Expiration time of warning)

* AT hhmm am/pm time_zone...(Warning basis statement and forecast impacts)

* THE TORNADO WILL BE NEAR... (Pathcast Version)
 LOCATION #1 AROUND hhmm am/pm time_zone...
 LOCATION #2 AROUND hhmm am/pm time_zone...

OR

LOCATIONS IMPACTED INCLUDE... (No Pathcast Version)
 LOCATION #1...
 LOCATION #2...

(Impact Locations are mandatory, either pathcast or no pathcast version listed above)

CALL TO ACTION

LAT...LON (Mandatory list of latitude/longitude points outlining the forecaster-drawn area of greatest impact)

\$\$

FORECASTER NAME/NUMBER (OPTIONAL)

Figure 2. Tornado Warning Format

3.4 Updates, Amendments and Corrections. Updates and amendments are not applicable. WFOs will reissue Tornado Warnings for significant grammatical errors, format or dissemination code errors, or for counties either omitted or erroneously added to a warning. Corrected warnings will have the same time in the Mass News Dissemination Header and the same Event Tracking Number in the Valid Time Event Code line as the original warning. WFOs should issue Severe Weather Statements to inform customers of erroneous counties removed from original warnings (either in the FIPS/Zone UGC code or in the body of the warning).

4. **Severe Weather Statement (product category SVS).**

4.1 **Mission Connection.** Severe Weather Statements provide the public and emergency managers with updated information for specific Severe Thunderstorm and Tornado Warnings. Updated information includes reports of observed severe weather. They also inform the public and emergency managers when all or portions of a warning have been canceled or have expired.

4.2 **Issuance Guidelines.**

4.2.1 **Creation Software.** WFOs will use WarnGen to issue Severe Weather Statements.

4.2.2 **Issuance Criteria.** WFOs should issue a Severe Weather Statement to provide notice a Severe Thunderstorm or Tornado Warning has been canceled for all or portions of the warning. WFOs should issue SVSs at least once during the valid time of a Severe Thunderstorm or Tornado Warning. WFOs may issue a Severe Weather Statement to provide notice that a Severe Thunderstorm or Tornado Warning has expired. WFOs should issue a Severe Weather Statement to notify customers that erroneous counties included in original Severe Thunderstorm or Tornado Warnings (either in the FIPs/Zone UGC code or in the body of the warning) have been removed.

4.2.3 **Issuance Time.** Severe Weather Statements are non-scheduled, event driven products.

4.2.4 **Valid Time.** The valid time will be from the time of issuance to the warning expiration or cancellation time.

4.2.5 **Product Expiration Time.** The product expiration time is no more than 15 minutes after the warning expiration or cancellation time.

4.3 **Technical Description.** Severe Weather Statements will follow the format and content described in this section.

4.3.1 **UGC Type.** County (Zone for Alaska Region and parts of Pacific Region).

4.3.2 **Mass News Disseminator Broadcast Line.** None.

4.3.3 **Mass News Disseminator Header.** The SVS MND header is "SEVERE WEATHER STATEMENT."

4.3.4 **Content.** WFOs should issue Severe Weather Statements to address the status of severe weather warnings. WFOs will not use Severe Weather Statements to expand in area or extend the valid time of Tornado and Severe Thunderstorm warnings. If the "area of greatest impact" changes during the valid time of the Severe Thunderstorm or Tornado Warning, forecasters should update the latitude and longitude pairs of the polygon within the warned county or counties.

4.3.5 Format.

WWUS5i cccc ddhhmm
SVSccc

SEVERE WEATHER STATEMENT
NATIONAL WEATHER SERVICE CITY STATE
time am/pm time_zone day mon dd yyyy

STC001-ddhhmm-
/k.aaa.cccc.pp.s.####.yymmddThhnnZ_B-yymmddThhnnZ_E/
COUNTY A -

...SEVERE THUNDERSTORM WARNING CANCELLED FOR COUNTY A...

LAT...LON (Mandatory list of latitude/longitude points outlining the forecaster-drawn area of greatest impact - modified within warned county or counties if impact area has changed since the issuance of the original warning or latest update statement)

\$\$

STC003-ddhhmm-
/k.aaa.cccc.pp.s.####.yymmddThhnnZ_B-yymmddThhnnZ_E/
COUNTY B -

...SEVERE THUNDERSTORM WARNING REMAINS IN EFFECT FOR COUNTY B UNTIL hhmm am/pm
time_zone...

UPDATED LOCATION AND MOVEMENT OF SEVERE THUNDERSTORMS. SPOTTER REPORTS OF SEVERE WEATHER. LOCATIONS TO BE AFFECTED BY SEVERE THUNDERSTORMS IN THE NEAR TERM (VALID TIME OF THE WARNING).

* THE TORNADO (or SEVERE THUNDERSTORM) WILL BE NEAR... (Optional Pathcast)
LOCATION #1 AROUND hhmm am/pm time_zone...
LOCATION #2 AROUND hhmm am/pm time_zone...

LAT...LON (Mandatory list of latitude/longitude points outlining the forecaster-drawn area of greatest impact - modified within warned county or counties if impact area has changed since the issuance of the original warning or latest update statement)

\$\$

FORECASTER NAME/NUMBER (OPTIONAL)

Figure 3. Severe Weather Statement Format

The VTEC Event Tracking Number (####) in the SVS will match the corresponding active Severe Thunderstorm or Tornado Warning for updates and cancellations.

4.4 Updates, Amendments and Corrections. Updates and amendments are not applicable. WFOs will correct statements for format and grammatical errors as required.

5. **Watch County Notification Message (product category WCN).**

5.1 Mission Connection. WFOs will issue Watch County Notification Messages (WCN) to provide the Storm Prediction Center (SPC), emergency managers, the media and the general public with a list of counties, parishes, independent cities and marine zones in a convective watch area within their geographic area of responsibility.

5.2 Issuance Guidelines.

5.2.1 Creation Software. WFOs should use the Watch/Warning/Advisory (WWA) software to create WCNs.

5.2.2 Issuance Criteria. Affected contiguous United States (CONUS) WFOs will issue initial WCNs after SPC issues the initial Watch Outline Update Message (WOU). Outside the contiguous United States (OCONUS) WFOs will issue WCNs without a WOU from SPC and based on the potential of damaging winds, severe hail, and/or tornadoes. WFOs will issue updated WCNs to cancel, extend the valid time, or extend in area portions of one or more convective watches in their geographic area of responsibility.

5.2.3 Issuance Time. WCNs are non-scheduled, event driven products.

5.2.4 Valid Time. WCNs are valid until the watch expiration time.

5.2.5 Product Expiration Time. The expiration time is equal to the convective watch end time found in the initial Watch Outline Update Message. WFOs may extend the convective watch expiration time in a WCN update after collaboration with SPC and the other WFOs in the watch area.

5.3 Technical Description. WCNs will follow the format and content described in this section.

5.3.1 UGC Type. County.

5.3.2 MND Header. The WCN MND header is “WATCH COUNTY NOTIFICATION FOR WATCH NUMBER nnnn”, where “nnnn” is the watch number. The watch number will be for the watch with the earliest issuance time if more than one watch is in effect for a WFO’s geographical area of responsibility.

5.3.3 Content. WFOs and SPC are partners in the convective watch process. In the spirit of partnership, WFOs and SPC work toward a consensus convective watch area and duration before, during, and at the end of convective watches. This partnership is defined as

collaboration. OCONUS WFOs are not required to collaborate with SPC.

The list of counties, parishes, independent cities and marine zones in the initial WCN within CONUS will match the list of counties, parishes, independent cities, and marine zones in the WOU issued by SPC for their geographic area of responsibility. The marine zones refer to adjacent coastal waters out to 20 nautical miles for the Atlantic and Pacific Oceans, and Gulf of Mexico. All marine zones are included in convective watches for the Great Lakes.

WFOs will issue updated WCNs to continue, cancel or extend in time or area portions of one or more active convective watch in their geographic area of responsibility. WFOs will also issue updated WCNs to include new watches issued within their geographic area of responsibility while existing watches remain in effect. CONUS WFOs will collaborate with SPC and affected WFOs on counties, parishes, independent cities or marine zones added to the initial watch area, or extensions to the expiration time of the initial convective watch area. CONUS WFOs will collaborate with SPC and adjacent WFOs when counties, parishes, independent cities or marine zones are transferred from an existing convective watch to a new convective watch (e.g. watch replacement). WFOs should ensure modifications to the convective watch area are consistent with modifications made by adjacent WFOs. The final WCN for a particular convective watch will cancel all remaining counties, parishes, independent cities and/or marine zones in the watch for their geographic area of responsibility.

5.3.4 Format.

WWUS6i cccc ddhhmm
WCNccc

WATCH COUNTY NOTIFICATION FOR WATCH nnnn (*earliest watch if more than one is listed*)
NATIONAL WEATHER SERVICE CITY STATE
time am/pm time_zone day mon dd yyyy

STC001-003-ddhhmm-
/k.aaa.cccc.pp.s.####.yymmddThhnnZ_B-yymmddThhnnZ_E/

THE NATIONAL WEATHER SERVICE HAS CANCELED SEVERE THUNDERSTORM (OR TORNADO WATCH)
nnnn FOR THE FOLLOWING AREAS (*If Cancellation Segment*)

THE NATIONAL WEATHER SERVICE HAS CANCELED A PORTION OF SEVERE THUNDERSTORM (OR
TORNADO) WATCH nnnn AND HAS ISSUED SEVERE THUNDERSTORM (OR TORNADO) WATCH nnnn UNTIL
time am/pm time_zone FOR THE FOLLOWING AREAS (*If Replacement Segment*)

THE NATIONAL WEATHER SERVICE HAS ISSUED SEVERE THUNDERSTORM (OR TORNADO) WATCH nnnn IN
EFFECT UNTIL time am/pm time_zone FOR THE FOLLOWING AREAS (*If New Segment*)

THE NATIONAL WEATHER SERVICE HAS EXTENDED SEVERE THUNDERSTORM (OR TORNADO) WATCH
nnnn TO INCLUDE THE FOLLOWING AREAS UNTIL time am/pm time_zone (*If Extension in Area Segment*)

SEVERE THUNDERSTORM (OR TORNADO) WATCH NUMBER nnnn...PREVIOUSLY IN EFFECT UNTIL time
am/pm time_zone...HAS BEEN EXTENDED UNTIL time am/pm time_zone FOR THE FOLLOWING AREAS (*If
Extension in Time Segment*)

SEVERE THUNDERSTORM (OR TORNADO) WATCH nnnn REMAINS VALID UNTIL time am/pm time_zone FOR
THE FOLLOWING AREAS (*If Continuation Segment*)

IN STATE 1 THIS WATCH INCLUDES n COUNTIES

LIST OF COUNTIES IN STATE 1 (OR PORTION OF STATE 1)

IN STATE 1 THIS WATCH INCLUDES n INDEPENDENT CITIES

LIST OF INDEPENDENT CITIES IN STATE 1

THIS WATCH INCLUDES THE FOLLOWING ADJACENT COASTAL WATERS

LIST OF MARINE ZONES

OTHER CITIES IN STATES 1 (OPTIONAL)

\$\$ (END OF SEGMENT)

Figure 5. Watch County Notification Message Format

The VTEC Event Tracking Number (####) will match the SPC watch number designated in the WOU, except for WCNs issued by WFOs in Pacific Region and Puerto Rico.

5.4 Updates, Amendments and Corrections. WFOs will update WCNs when counties, parishes, independent cities, or marine zones are canceled or added from the watch or the watch valid time is extended. WFOs will correct WCNs for format and grammatical errors.

6. **Areal Outline Statement (Product Category SLS).**

6.1 **Mission Connection.** Regionally designated CONUS WFOs will issue Areal Outline Statements to define the counties and independent cities included in an initial convective watch area. This type of statement provides the public and emergency managers with the names of counties and independent cities threatened by potential severe weather.

6.2 **Issuance Guidelines.**

6.2.1 **Creation Software.** Designated WFOs should use WWA to create SLSs.

6.2.2 **Issuance Criteria.** An SLS is issued after receiving the Watch Outline Update Message from the SPC.

6.2.3 **Issuance Time.** WFOs should issue the SLS no later than 15 minutes after SPC issues the initial the WOU. However, the issuance time will be set to match the issuance time of the WOU.

6.2.4 **Valid Time.** SLSs are valid until the expiration time of the convective watch.

6.2.5 **Product Expiration Time.** WFOs will set the expiration time equal to the time found in the WOU.

6.3 **Technical Description.** SLSs should follow the format and content described in this section.

6.3.1 **Mass News Disseminator Broadcast Line.** WFOs may use “BULLETIN - IMMEDIATE BROADCAST REQUESTED” in SLSs if requested by local emergency management and/or media. The term “BULLETIN” is used when information is sufficiently urgent to warrant breaking into a normal broadcast.

6.3.2 **Mass News Disseminator Header.** The SLS MND header is “(STATE - Optional) OUTLINE FOR TORNADO (or SEVERE THUNDERSTORM) WATCH NUMBER nnnn, where nnnn is the watch number and “STATE” is replaced with the state name(s).

6.3.3 **Content.** Regionally designated CONUS WFOs will issue SLSs for initial convective watch areas with proper time zone references. Adjacent coastal waters refers to a WFO’s near shore responsibility (out to 5 nautical miles for the Great Lakes, and out to 20 nautical miles for oceans). WFOs with SLS responsibility will collaborate with other affected WFOs and SPC to ensure the counties, parishes and independent cities in the SLS match other convective watch products at issuance time.

6.3.4 Format.

WWUS6i Kccc ddhhmm
SLSst

BULLETIN - IMMEDIATE BROADCAST REQUESTED (**OPTIONAL**)
[STATE - Optional] AREAL OUTLINE FOR SEVERE THUNDERSTORM WATCH (or TORNADO)
NUMBER nnnn
NATIONAL WEATHER SERVICE CITY STATE
time am/pm time_zone day mon dd yyyy

SEVERE THUNDERSTORM (or TORNADO) WATCH NUMBER nnnn IS IN EFFECT UNTIL XXX AM/PM
TIME ZONE AND INCLUDES THE FOLLOWING AREAS... (The ellipsis is critical to mark the end of the
text, and signal that UGC codes follow)

STC001-002-003-ddhhmm-

PORTION OF STATE (OPTIONAL)
LIST OF COUNTIES
LIST OF INDEPENDENT CITIES
LIST OF CITIES IN THE COUNTIES MENTIONED ABOVE (OPTIONAL)

\$\$ (END OF SEGMENT)

STC001-002-003-ddhhmm-

PORTION OF STATE (OPTIONAL)
LIST OF COUNTIES
CITIES (OPTIONAL)

\$\$ (END OF SEGMENT)

Figure 1. Areal Outline Statement Format

6.4 Updates, Amendments and Corrections. Updates and amendments are not applicable.
WFOs will correct statements for format and grammatical errors.

APPENDIX A - Examples

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1. Introduction. This appendix provides the public with examples of severe weather products issued by WFOs.
2. Severe Thunderstorm Warning.

WUUS54 KFWD 192344
SVRFTW
TXC333-200030-
/O.NEW.KFTW.SV.W.0035.020319T2343Z-020320T0030Z/

BULLETIN - IMMEDIATE BROADCAST REQUESTED
SEVERE THUNDERSTORM WARNING
NATIONAL WEATHER SERVICE FORT WORTH TX
543 PM CST TUE MAR 19 2002

THE NATIONAL WEATHER SERVICE IN FORT WORTH
HAS ISSUED A

* SEVERE THUNDERSTORM WARNING FOR...
MILLS COUNTY IN NORTH CENTRAL TEXAS

* UNTIL 630 PM CST

* AT 543 PM CST...NATIONAL WEATHER SERVICE DOPPLER RADAR DETECTED A
SEVERE THUNDERSTORM 15 MILES WEST OF GOLDTHWAITE...MOVING
NORTHEAST AT 50 MPH. DAMAGING WINDS IN EXCESS OF 60 MPH ARE LIKELY
WITH THIS STORM.

* THE SEVERE THUNDERSTORM WILL BE NEAR...
GOLDTHWAITE AROUND 600 PM...

TAKE COVER IN A STURDY STRUCTURE UNTIL THE STORM PASSES. A TORNADO
WATCH IS IN EFFECT FOR THE WARNING AREA. SEVERE THUNDERSTORMS CAN
PRODUCE TORNADOES WITH LITTLE OR NO WARNING.

LAT...LON 3147 9905 3126 9857 3143 9831 3172 9852
\$\$

3. Tornado Warning.

WFUS53 KSGF 181917

TORSGF

MOC109-182000-

/O.NEW.KSGF.TO.W.0150.031118T1915Z-031118T2000Z/

BULLETIN - EAS ACTIVATION REQUESTED

TORNADO WARNING

NATIONAL WEATHER SERVICE SPRINGFIELD MO

116 PM CST TUE NOV 18 2003

THE NATIONAL WEATHER SERVICE IN SPRINGFIELD
HAS ISSUED A

* TORNADO WARNING FOR...

SOUTHEASTERN LAWRENCE COUNTY IN MISSOURI

* UNTIL 200 PM CST.

* AT 115 PM CST...NATIONAL WEATHER SERVICE DOPPLER RADAR INDICATED A
SEVERE THUNDERSTORM CAPABLE OF PRODUCING A TORNADO. THIS
DANGEROUS STORM WAS LOCATED NEAR AURORA...OR 10 MILES EAST OF
MONETT...AND MOVING EAST AT 15 MPH.

* THIS TORNADO WILL BE NEAR...

MARIONVILLE BY 135 PM CST.

IF YOU LIVE IN AURORA...TAKE COVER NOW!!! THIS TORNADO WARNING
REPLACES THE SEVERE THUNDERSTORM WARNING THAT WAS IN EFFECT FOR
THE SAME AREA. GO TO A BASEMENT OR SMALL INTERIOR ROOM ON THE
LOWEST FLOOR!

LAT...LON 3700 9383 3693 9384 3693 9363 3702 9363

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4. Severe Weather Statement.

WWUS54 KSHV 230620
SVSSHV

SEVERE WEATHER STATEMENT
NATIONAL WEATHER SERVICE SHREVEPORT LA
1220 AM CST TUE DEC 23 2003

LAC031-230645-
/O.CON.KSHV.SV.W.0450.000000T0000Z-031223T0645Z/
DESOTO-
1220 AM CST TUE DEC 23 2003

...SEVERE THUNDERSTORM WARNING IN EFFECT UNTIL 1245 AM CST FOR DE
SOTO PARISH IN NORTHWEST LOUISIANA...

AT 1220 AM CST...DOPPLER WEATHER RADAR IN SHREVEPORT DETECTED A
SEVERE THUNDERSTORM OVER EASTERN DESOTO PARISH...ABOUT 10 MILES
EAST SOUTHEAST OF STONEWALL...MOVING TO THE EAST AT ABOUT 35 MPH.
THE STORM IS CAPABLE OF PRODUCING HAIL TO NEAR THREE QUARTERS OF AN
INCH IN DIAMETER.

LAT...LON 3230 9366 3213 9354 3201 9384 3226 9385

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Partial Cancellation Severe Weather Statement

WWUS53 KLOT 312234
SVSLOT

SEVERE WEATHER STATEMENT
NATIONAL WEATHER SERVICE CHICAGO IL
532 PM CDT MON MAY 31 2004

ILC093-312245-
/O.CAN.KLOT.SV.W.0093.000000T0000Z-040531T2245Z/
DEKALB-
532 PM CDT MON MAY 31 2004

...THE SEVERE THUNDERSTORM WARNING FOR DE KALB COUNTY HAS BEEN
CANCELLED...

THE SEVERE THUNDERSTORMS HAVE MOVED OUT OF SOUTHERN DE KALB COUNTY.
THUS...THE SEVERE THUNDERSTORM WARNING HAS BEEN CANCELLED FOR SOUTHERN
DE KALB COUNTY.

LAT...LON 4171 8868 4154 8859 4157 8828 4171 8828

\$\$

ILC037-312245-
/O.CON.KLOT.SV.W.0093.000000T0000Z-040531T2245Z/
KENDALL-
532 PM CDT MON MAY 31 2004

..THE SEVERE THUNDERSTORM WARNING FOR KENDALL COUNTY IN ILLINOIS
CONTINUES UNTIL 545 PM CDT...

AT 532 PM CDT A SEVERE THUNDERSTORM WAS LOCATED 3 MILES EAST OF
YORKVILLE...MOVING EAST AT 45 MPH.

* THE SEVERE THUNDERSTORM WILL BE NEAR...
OSWEGO AROUND 540 PM CDT.

PENNY SIZE HAIL. WINDS 60 TO 75 MPH...WHICH CAN KNOCK DOWN TREE LIMBS AND
POWER LINES...DAMAGE SHEDS...BARNs AND OTHER WEAK STRUCTURES...AND PUSH
TRUCKS OFF THE HIGHWAY.

LAT...LON 4171 8868 4154 8859 4157 8828 4171 8828

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5. Watch County Notification Message

(Initial Issuance)

WWUS64 KHGX 111709
WCNHGX

WATCH COUNTY NOTIFICATION FOR WATCH 856
NATIONAL WEATHER SERVICE HOUSTON/GALVESTON TX
1206 PM CDT MON AUG 11 2003

TXC015-039-041-051-071-089-157-167-185-201-239-291-321-339-407-471-
473-477-481-GMZ235-335-355-112300-
/O.NEW.KHGX.SV.A.0856.030811T1705Z-030811T2300Z/

THE NATIONAL WEATHER SERVICE HAS ISSUED SEVERE THUNDERSTORM
WATCH 856 UNTIL 600 PM CDT MONDAY EVENING FOR THE FOLLOWING AREAS

IN SOUTHEAST TEXAS THIS WATCH INCLUDES 18 COUNTIES

AUSTIN	BRAZORIA	BRAZOS
BURLESON	CHAMBERS	COLORADO
FORT BEND	GALVESTON	GRIMES
HARRIS	JACKSON	LIBERTY
MATAGORDA	MONTGOMERY	SAN JACINTO
WALKER	WALLER	WASHINGTON
WHARTON		

THIS WATCH INCLUDES THE FOLLOWING ADJACENT COASTAL WATERS

COASTAL WATERS FROM MATAGORDA SHIP CHANNEL TO PORT ARANSAS PASS
OUT TO 20 NM

GALVESTON BAY

COASTAL WATERS FROM HIGH ISLAND TO FREEPORT TX OUT TO 20 NM

THIS INCLUDES THE CITIES OF WHARTON...TEXAS CITY...SEALY...
RICHMOND...PEARLAND...PASADENA...NAVASOTA...LIBERTY...HUNTSVILLE...
HOUSTON...HEMPSTEAD...GALVESTON...EL CAMPO...EDNA...
CONROE...COLUMBUS...COLLEGE STATION...CALDWELL...BRYAN...
BRENHAM...BELLVILLE...BAY CITY...ANGLETON...ANAHUAC AND
COLDSRING.

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(Clearing Counties - One Watch in Effect)

WWUS64 KTSA 200510
WCNTSA

WATCH COUNTY NOTIFICATION FOR WATCH 135
NATIONAL WEATHER SERVICE TULSA OK
1210 AM CDT SUN APR 20 2003

ARC007-143-OKC001-021-023-035-041-061-077-091-097-101-105-107-111-
115-121-127-131-135-143-145-147-200700-
/O.CAN.KTSA.SV.A.0135.000000T0000Z-030420T0700Z/

THE NATIONAL WEATHER SERVICE HAS CLEARED A PORTION OF SEVERE
THUNDERSTORM WATCH 135. AREAS CLEARED FROM THE SEVERE
THUNDERSTORM WATCH INCLUDE

IN ARKANSAS THIS WATCH INCLUDES 2 COUNTIES...
IN NORTHWEST ARKANSAS

BENTON WASHINGTON

IN OKLAHOMA THIS WATCH INCLUDES 21 COUNTIES...
IN EAST CENTRAL OKLAHOMA

CHEROKEE MUSKOGEE OKFUSKEE
SEQUOYAH

IN NORTHEAST OKLAHOMA

ADAIR CRAIG DELAWARE
MAYES NOWATA OKMULGEE
OTTAWA ROGERS TULSA
WAGONER WASHINGTON

IN SOUTHEAST OKLAHOMA

CHOCTAW HASKELL LATIMER
MCINTOSH PITTSBURG PUSHMATAHA

NWSI 10-511 NOVEMBER 3, 2004

THIS INCLUDES THE CITIES OF ANTLERS... BARTLESVILLE... BENTONVILLE...
BROKEN ARROW ...CLAREMORE ...CLAYTON... EUFAULA... FAYETTEVILLE...
HUGO...JAY...MCALESTER...MIAMI...MUSKOGEE...NOWATA...OKEMAH...OKMULGE
E...PRYOR...ROGERS...SALLISAW...SAND SPRINGS...SILOAM SPRINGS
...SPRINGDALE...STIGLER ...STILWELL...TAHLEQUAH...TULSA...VINITA...WAGONER
AND WILBURTON.

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ARC033-131-OKC079-200700-
/O.CON.KTSA.SV.A.0135.000000T0000Z-030420T0700Z/

SEVERE THUNDERSTORM WATCH 135 REMAINS VALID UNTIL 200 AM CDT FOR
THE FOLLOWING AREAS

IN ARKANSAS THIS WATCH INCLUDES 2 COUNTIES...
IN NORTHWEST ARKANSAS

CRAWFORD

IN WEST CENTRAL ARKANSAS

SEBASTIAN

IN OKLAHOMA THIS WATCH INCLUDES 1 COUNTY...
IN SOUTHEAST OKLAHOMA

LE FLORE

THIS INCLUDES THE CITIES OF CEDARVILLE...FORT
SMITH...MOUNTAINBURG...NATURAL DAM...POTEAU AND VAN BUREN.

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NWSI 10-511 NOVEMBER 3, 2004

(Clearing Remaining Counties from a Watch)

WWUS63 KGID 160307
WCNGID

WATCH COUNTY NOTIFICATION FOR WATCH 121
NATIONAL WEATHER SERVICE HASTINGS NE
1007 PM CDT TUE APR 15 2003

NEC077-081-121-125-143-175-160400-
/O.CAN.KGID.SV.A.0121.000000T0000Z-030416T0400Z/

THE NATIONAL WEATHER SERVICE HAS CANCELED SEVERE THUNDERSTORM
WATCH 121 FOR THE FOLLOWING AREAS

IN NEBRASKA THIS WATCH INCLUDES 6 COUNTIES...
IN CENTRAL NEBRASKA

GREELEY MERRICK NANCE
VALLEY

IN EAST CENTRAL NEBRASKA

POLK

IN SOUTH CENTRAL NEBRASKA

HAMILTON

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NWSI 10-511 NOVEMBER 3, 2004

(Second Watch Issued While First Watch Remains in Effect)

WWUS64 KOUN 191931
WCNOUN

WATCH COUNTY NOTIFICATION FOR WATCH 132
NATIONAL WEATHER SERVICE NORMAN OK
231 PM CDT SAT APR 19 2003

OKC005-013-029-063-069-095-123-125-133-200200-
/O.NEW.KOUN.TO.A.0132.030419T1930Z-030420T0200Z/

THE NATIONAL WEATHER SERVICE HAS ISSUED TORNADO WATCH 132 UNTIL 900
PM CDT FOR THE FOLLOWING AREAS

IN OKLAHOMA THIS WATCH INCLUDES 9 COUNTIES...
IN CENTRAL OKLAHOMA

POTTAWATOMIE

IN EAST CENTRAL OKLAHOMA

PONTOTOC SEMINOLE

IN SOUTHEAST OKLAHOMA

ATOKA	BRYAN	COAL
HUGHES	JOHNSTON	MARSHALL

THIS INCLUDES THE CITIES OF ADA...DURANT AND SHAWNEE.

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OKC003-011-017-039-043-045-047-053-059-071-073-081-083-093-103-109-
119-129-151-153-200100-
/O.CON.KOUN.TO.A.0131.000000T0000Z-030420T0100Z/

TORNADO WATCH 131 REMAINS VALID UNTIL 800 PM CDT SATURDAY EVENING
FOR THE FOLLOWING COUNTIES

IN OKLAHOMA THIS WATCH INCLUDES 20 COUNTIES...

IN CENTRAL OKLAHOMA

CANADIAN	KINGFISHER	LINCOLN
LOGAN	OKLAHOMA	PAYNE

IN NORTHERN OKLAHOMA

GARFIELD	GRANT	KAY
NOBLE		

IN NORTHWEST OKLAHOMA

ALFALFA	BLAINE	DEWEY
ELLIS	HARPER	MAJOR
WOODS	WOODWARD	

IN WESTERN OKLAHOMA

CUSTER	ROGER MILLS
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THIS INCLUDES THE CITIES OF ALVA...CLINTON...EDMOND...EL RENO...
ENID...GUTHRIE...KINGFISHER...OKLAHOMA CITY...PONCA CITY...
STILLWATER...WEATHERFORD AND WOODWARD.

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NWSI 10-511 NOVEMBER 3, 2004

(Second Watch Issued While First Watch Remains in Effect - Counties Which Were in First Watch are now in Second Watch)

WWUS64 KOUN 152202
WCNOUN

WATCH COUNTY NOTIFICATION FOR WATCH 120
NATIONAL WEATHER SERVICE NORMAN OK
500 PM CDT TUE APR 15 2003

OKC055-057-075-160400-
/O.CAN.KOUN.TO.A.0118.000000T0000Z-030416T0000Z/
/O.NEW.KOUN.TO.A.0120.030415T2200Z-030416T0400Z/

THE NATIONAL WEATHER SERVICE HAS CANCELED A PORTION OF TORNADO
WATCH 118 AND HAS ISSUED TORNADO WATCH 120 UNTIL 1100 PM CDT FOR THE
FOLLOWING AREAS

IN OKLAHOMA THIS WATCH INCLUDES 3 COUNTIES...
IN SOUTHWEST OKLAHOMA

GREER HARMON KIOWA

THIS INCLUDES THE CITIES OF HOBART.

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OKC031-033-065-141-TXC009-023-155-197-275-485-487-160400-
/O.NEW.KOUN.TO.A.0120.030415T2200Z-030416T0400Z/

THE NATIONAL WEATHER SERVICE HAS ISSUED TORNADO WATCH 120 UNTIL
1100 PM CDT FOR THE FOLLOWING AREAS

IN OKLAHOMA THIS WATCH INCLUDES 4 COUNTIES...
IN SOUTHWEST OKLAHOMA

COMANCHE COTTON JACKSON
TILLMAN

IN TEXAS THIS WATCH INCLUDES 7 COUNTIES...
IN NORTHERN TEXAS

NWSI 10-511 NOVEMBER 3, 2004

ARCHER	BAYLOR	FOARD
HARDEMAN	KNOX	WICHITA
WILBARGER		

THIS INCLUDES THE CITIES OF ALTUS...BURKBURNETT...ELECTRA...IOWA
PARK...LAWTON...QUANAH...SEYMOUR...VERNON AND WICHITA FALLS.

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OKC009-039-043-045-059-129-149-151-153-160000-
/O.CON.KOUN.TO.A.0118.000000T0000Z-030416T0000Z/

TORNADO WATCH 118 REMAINS VALID UNTIL 700 PM CDT TUESDAY EVENING
FOR THE FOLLOWING COUNTIES

IN OKLAHOMA THIS WATCH INCLUDES 9 COUNTIES...
IN NORTHWEST OKLAHOMA

DEWEY	ELLIS	HARPER
WOODS	WOODWARD	

IN WESTERN OKLAHOMA

BECKHAM	CUSTER	ROGER MILLS
WASHITA		

THIS INCLUDES THE CITIES OF ALVA...CLINTON...ELK CITY...WEATHERFORD AND
WOODWARD.

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NWSI 10-511 NOVEMBER 3, 2004

(Extending a Watch's Expiration Time for Selected Counties)

WWUS63 KLSX 081747
WCNLSX

TEST...WATCH COUNTY NOTIFICATION FOR WATCH 9990...TEST
NATIONAL WEATHER SERVICE ST LOUIS MO
1246 PM CDT TUE APR 8 2003

MOC093-123-179-187-081900-
/T.EXT.KLSX.SV.A.9990.000000T0000Z-030408T1900Z/

SEVERE THUNDERSTORM WATCH 9990...PREVIOUSLY IN EFFECT UNTIL 100 PM
CDT...HAS BEEN EXTENDED UNTIL 200 PM CDT FOR THE FOLLOWING AREAS

IN MISSOURI THIS WATCH INCLUDES 4 COUNTIES...

IN SOUTHEAST MISSOURI

IRON MADISON REYNOLDS
ST. FRANCOIS

THIS INCLUDES THE CITIES OF FARMINGTON.

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NWSI 10-511 NOVEMBER 3, 2004

(Extension in Area - Adding Counties)

WWUS63 KIND 142033
WCNIND

TEST...WATCH COUNTY NOTIFICATION FOR WATCH 9993...TEST
NATIONAL WEATHER SERVICE INDIANAPOLIS IN
331 PM EST FRI MAR 14 2003

INC035-135-142200-
/T.EXA.KIND.TO.A.9993.000000T0000Z-030314T2200Z/

THE NATIONAL WEATHER SERVICE HAS EXTENDED TORNADO WATCH 9993 TO
INCLUDE THE FOLLOWING AREAS UNTIL 500 PM EST

IN INDIANA THIS WATCH INCLUDES 2 COUNTIES...
IN EAST CENTRAL EAST CENTRAL INDIANA

DELAWARE RANDOLPH

THIS INCLUDES THE CITIES OF MUNCIE.

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6. Areal Outline Statement.

WWUS61 KLWX 111609
SLSDC

BULLETIN - IMMEDIATE BROADCAST REQUESTED
AREAL OUTLINE FOR TORNADO WATCH NUMBER 673
NATIONAL WEATHER SERVICE BALTIMORE MD/WASHINGTON DC
1107 AM EST MON NOV 11 2002

TORNADO WATCH NUMBER 673 IS IN EFFECT UNTIL 300 PM EST AND INCLUDES
THE FOLLOWING AREAS...

VAC001-036-073-093-095-097-101-103-115-119-127-131-133-149-175-181-
183-199-550-620-650-670-700-710-730-735-740-800-810-830-112000-

VIRGINIA COUNTIES INCLUDED ARE

ACCOMACK	CHARLES CITY	GLOUCESTER
ISLE OF WIGHT	JAMES CITY	KING AND QUEEN
KING WILLIAM	LANCASTER	MATHEWS
MIDDLESEX	NEW KENT	KING AND QUEEN
NORTHUMBERLAND	PRINCE GEORGE	SOUTHAMPTON
SURRY	SUSSEX	YORK

VIRGINIA INDEPENDENT CITIES INCLUDED ARE

CITY OF HOPEWELL	CITY OF PETERSBURG
CITY OF PORTSMOUTH	CITY OF VIRGINIA BEACH
CITY OF WILLIAMSBURG	CITY OF NEWPORT NEWS
CITY OF POQUOSON	CITY OF HAMPTON
CITY OF NORFOLK	CITY OF SUFFOLK
CITY OF CHESAPEAKE	CITY OF FRANKLIN

MDC019-039-045-047112000-

MARYLAND COUNTIES INCLUDED ARE

DORECHESTER	SOMERSET	WICOMICO
WORCESTER		

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